

**Information Technology Bulletin
Commonwealth of Pennsylvania
Governor's Office of Administration/Office for Information Technology**

ITB Number:	ITB-APP029	
ITB Title:	Portal Technology Standards	
Issued by:	Deputy Secretary for Information Technology	
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Domain:	Application	
Discipline:	User Interaction	
Technology Area:	Portal	
Revision History Date:	Description:	
10/25/2010	J2EE changed to Java EE ITB Refresh	

Abstract:

The purpose of this Information Technology Bulletin (ITB) is to establish enterprise-wide standards and guidance for portals. A portal is a Web-based application that serves as an entry point or gateway to resources and services, allowing personalization and access to content from disparate sources. Portals provide windows to other applications through modules or portlets. Modules are included in base portal products and can be purchased through third parties or can be custom developed. Examples of modules are applications such as: single sign-on, search, discussion forums, collaboration, and content management.

Portal technology provides personalized interaction with enterprise-wide systems and services, allowing access to real-time information and empowering employees, customers and partners to be more informed and effective. Portals also improve process management, business to business integration and Web service initiatives by providing a simpler and more efficient means to manage dynamic workflows, or route tasks and exceptions to the appropriate entities.

Portals are extensible and provide developers with open application integration and extension mechanisms such as application programming interfaces (API). The Commonwealth has standards on the development of applications through Java EE and .NET, and the portal standard supports development on both of these platforms.

Web services are functions that are published to a Web server for remote invocation via the intranet or Internet. The Commonwealth's portal standard incorporates the open standards as listed below.

Open Standards Incorporated into the Commonwealth's Portal

HTTP	Hyper Text Transfer Protocol is the World Wide Web protocol that executes request and retrieve functions of a server.
HTTPS	Hyper Text Transfer Protocol Secure is the World Wide Web protocol that enables the secure transmission of Web pages utilizing encryption.
JSR168	Java Specification Request 168 is a specification that allows for portlets created for one portal solution to execute within a non-native hosted Java based portal container.

SOA	The foundation of this communication is a Services-Oriented Architecture (SOA). A service-oriented architecture is a collection of self-contained services – Web or otherwise – that communicate with each other in a loosely coupled fashion across a distributed environment. An SOA may typically utilize Web services to communicate with components from new and existing systems. Examples of other services for consumption by this portal include, but are not limited to: Active Directory; legacy applications; Microsoft Exchange; FileNet; and relational databases including Oracle, DB2, and SQL.
SOAP	Simple Object Access Protocol (SOAP) is a lightweight protocol for the exchange of information in a decentralized, distributed environment. A SOAP message is a transmission of information from a sender to a receiver. SOAP messages are combined to perform request/response patterns.
UDDI	Universal Description, Discovery, and Integration is a standard for platform-independent, open framework describing services on the Internet or Intranet.
XML	Extensible Markup Language is a standard for creating markup languages which describe the structure of data. XML enables authors to define their own tags. XML is a formal specification of the World Wide Web Consortium.
WSDL	Web Services Description Language forms the basis for Web services.
WSRP	Web Services for Remote Portlets define a web service interface for accessing and interacting with interactive presentation-oriented Web services.

Content Management:

The Commonwealth's portal includes a component which provides Content Management. This Commonwealth standard makes it easier to publish new content to portal pages, interactive communities and applications hosted in the portal framework. Using Content Management, business users without web programming skills can create form-based web content in a controlled, consistent way, such as:

- Information Technology Support Documents;
- Commonwealth-wide communications;
- Announcements;
- Online Forms; and
- Citizen updates.

Content templates allow business users to create and publish new content based on pre-existing models and layouts, and make it easy to cascade similar changes across pages and sites. Features such as publishing, workflow, library services and integrated administration make it easy for individual business content publishers and portal administrators to work in parallel rather than in conflict with one another. This allows business users without web development skills to create visually rich content for portal pages, communities and applications.

The *Portal Technology Best Practices*, BPD-APP029C document provides guidance to agencies on best practices for building a portal. *Portal Technology Product Standards*, STD-APP029A, and *Content Management Product Standards*, STD-APP029B documents provide guidance to agencies on what the current standards are and the status of other portal products that are being used or being considered for use.

A list of approved vendors has been identified to provide training and mentoring services for the enterprise portal, which includes Portal Collaboration Workshops and Enterprise Portal Manager Training. For more information refer to the [Enterprise IT Training \(EITT\) Web site](#).

General:

This ITB applies to all departments, boards, commissions and councils under the Governor's jurisdiction. Agencies not under the Governor's jurisdiction are strongly encouraged to follow this policy.

The Application Domain Team is engaged to set portal standards for the Commonwealth. The domain team evaluated the web application development methodologies currently deployed within the Commonwealth, the projected market longevity, existing platform, technical and support capabilities, performance and management functionality, and other relevant business and technical criteria to support its recommendations.

Policy:

The main objective of this policy is to provide guidance and direction to agencies that have a need to move to a new portal technology.

Portal projects hosted within the Commonwealth infrastructure are required to use the current standards and best practices defined by this document.

Major revisions to existing portals that are not using the current standards will be reviewed as part of the *IT Procurement Review Process*, ITB-EPM003, to determine if the investment warrants a change in standards at that time. For Web applications classified as "Retire," a date for migration from this technology has been established. A definition for the classification of "Retire" can be found in [Technology Life-Cycle Classifications](#).

All IT projects related to portal development are subject to review prior to inception for compliance with this standard through the Community of Practice (CoP) Review and/or the Procurement Review Processes.

Refresh Schedule:

All standards identified in this ITB are subject to periodic review and possible revision, or upon request by the Enterprise Architecture Standards Committee (EASC).

Exemption from This Policy:

In the event an agency chooses to seek an exemption, for reasons such as the need to comply with requirements for a federally mandated system, a request for waiver may be submitted via the Community of Practice Procurement and Architectural Review (COPPAR) process. Requests are to be entered into the COPPAR Tool located at WWW.COPPAR.STATE.PA.US. Agency CIO approval is required. Contact your agency [CoP Planner](#) for further details or assistance.

Questions:

Questions regarding this policy are to be directed to ra-oaitb@state.pa.us.

Policy Supplements:

STD-APP029A: Portal Technology Product Standards

STD-APP029B: Content Management Product Standards

BPD-APP029C: Portal Technology Best Practices

References:

ITB-EPM003: IT Procurement Review Process

Enterprise IT Training (EITT) Web site.

Technology Life-Cycle Classifications.